AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPENDITED PROCEDURE

Serial Number: 10/005667

Filing Date: November 2, 2001

Title: METHOD OF FABRICATING AN INTEGRATED CIRCUIT HAVING A MEMS DEVICE

Assignee: Intel Corporation

## IN THE CLAIMS

Page 2

Dkt: 884.591US1 (INTEL)

Please amend the claims as follows:

Claims 1-28 (Canceled)

29. (Currently Amended) A method comprising:

forming a MEMS device, a <u>first</u> ring layer, and a <u>first</u> pad on a substrate such that the MEMS device and the <u>first</u> pad are within the <u>first</u> ring layer;

forming an integrated circuit; and

bonding the <u>first</u> ring layer and the <u>first</u> pad to the integrated circuit to form a sealed cavity that includes the MEMS device and the <u>first</u> pad; and

wherein the first ring layer is electrically conductive.

- 30. (Currently Amended) The method of claim 29, wherein the ring layer and the <u>first</u> pad on the substrate are is electrically conductive.
- 31. (Currently Amended) The method of claim 29, wherein forming the integrated circuit includes forming a <u>second</u> ring layer and a <u>second</u> pad on the integrated circuit such that the <u>second</u> pad on the integrated circuit is within the <u>second</u> ring layer on the integrated circuit.
- 32. (Currently Amended) The method of claim 31, wherein bonding the <u>first</u> ring layer and the <u>first</u> pad on the substrate to the integrated circuit includes bonding the <u>first</u> ring layer on the substrate to the <u>second</u> ring layer on the integrated circuit and bonding the <u>first</u> pad on the substrate to the <u>second</u> pad on the integrated circuit.
- 33. (Currently Amended) The method of claim 29, wherein bonding the <u>first</u> ring layer and the <u>first</u> pad to the integrated circuit to form a sealed cavity includes bonding the <u>first</u> ring layer and the <u>first</u> pad to the integrated circuit in a controlled environment.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 - EXPENDITED PROCEDURE

Serial Number: 10/005667

Filing Date: November 2, 2001

Title: METHOD OF FABRICATING AN INTEGRATED CIRCUIT HAVING A MEMS DEVICE

Assignee: Intel Corporation

34. (Currently Amended) The method according to claim 33, wherein bonding the <u>first</u> ring layer and the <u>first</u> pad to the integrated circuit in a controlled environment includes bonding the

Page 3

Dkt: 884.591US1 (INTEL)

<u>first</u> ring layer and the <u>first</u> pad to the integrated circuit in a vacuum.

35. (Currently Amended) A method comprising:

forming a MEMS device on a substrate;

forming a <u>first</u> ring layer and a <u>first</u> pad on an integrated circuit such that the <u>first</u> pad is within the first ring layer on the integrated circuit; <del>and</del>

bonding the <u>first</u> ring layer and the <u>first</u> pad to the substrate to form a sealed cavity that includes the MEMS device and the <u>first</u> pad, the <u>first pad</u> pads not mechanically engaging the MEMS device; and

wherein the first ring layer on the integrated circuit is electrically conductive.

36. (Currently Amended) The method of claim 35, wherein forming a the MEMS device on a the substrate includes forming a second ring layer and a second pad on the substrate such that the MEMS device and the second pad on the substrate are within the second ring layer on the substrate, and wherein bonding the first ring layer and the first pad on the integrated circuit to the substrate includes bonding the second ring layer on the substrate to the first ring layer on the integrated circuit and bonding the second pad on the substrate to the first pad on the integrated circuit.

- 37. (Currently Amended) The method of claim 36, wherein the <u>second</u> ring <u>layer</u> layers on the substrate <u>is and the integrated circuit are</u> electrically conductive.
- 38. (Currently Amended) The method of claim 35, wherein bonding the <u>first</u> ring layer and the <u>first</u> pad to the substrate to form a sealed cavity includes bonding the <u>first</u> ring layer and the <u>first</u> pad to the substrate in a controlled environment.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPENDITED PROCEDURE

Serial Number: 10/005667 Filing Date: November 2, 2001

Title: METHOD OF FABRICATING AN INTEGRATED CIRCUIT HAVING A MEMS DEVICE

Assignee: Intel Corporation

## 39-41. (Canceled)

42. (Currently Amended) A method comprising:

forming a MEMS device on a substrate;

forming a first pad on the substrate near the MEMS device;

forming a <u>first electrically conductive</u> ring layer on the substrate that surrounds the MEMS device and the <u>first pad</u>;

Page 4

Dkt: 884.591US1 (INTEL)

forming an integrated circuit;

forming a second pad on the integrated circuit;

forming a <u>second electrically conductive</u> ring layer on a surface of the integrated circuit that surrounds the <u>second</u> pad on the integrated circuit;

bonding the <u>first</u> pad on the substrate to the <u>second</u> pad on the integrated circuit; and bonding the <u>first electrically conductive</u> ring layer on the substrate to the <u>second</u> <u>electrically conductive</u> ring layer on the integrated circuit to form a sealed cavity that includes the MEMS device and the <u>first and second</u> pads.

43. (Currently Amended) The method of claim 42, wherein bonding the <u>first electrically conductive</u> ring layer on the substrate to the <u>second electrically conductive</u> ring layer on the integrated circuit includes coupling the substrate to the integrated circuit in a controlled environment.

## 44. (Canceled)

45. (Currently Amended) The method of claim 42, further comprising:

forming at least one additional pad within the <u>first electrically conductive</u> ring layer on the substrate near the MEMS device;

forming at least one additional pad within the <u>second electrically conductive</u> ring layer on the integrated circuit; and

bonding the at least one additional pad on the substrate to the at least one <u>additional</u> pad on the integrated circuit within the sealed cavity.